

COASTAL CONSERVANCY

Staff Recommendation
November 30, 2023

VALLEMAR SEWER INFRASTRUCTURE RELOCATION PROJECT

Project No. 23-075-01
Project Manager: Jessica Madden

RECOMMENDED ACTION: Authorization to disburse up to \$813,500 to the San Mateo Resource Conservation District to conduct community outreach and prepare technical studies, preliminary design plans, and environmental review and permit documents for the relocation of public sewer infrastructure away from an eroding coastal bluff in the Montara community of San Mateo County.

LOCATION: Montara community, San Mateo County

EXHIBITS

- Exhibit 1: [Project Location Maps](#)
 - Exhibit 2: [Site Plans](#)
 - Exhibit 3: [Site Photos](#)
 - Exhibit 4: [Project Letters](#)
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RESOLUTION AND FINDINGS

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes a grant of an amount not to exceed eight hundred thirteen thousand five hundred dollars (\$813,500) to the San Mateo Resource Conservation District (“the grantee”) to conduct community outreach and prepare technical studies, preliminary design plans, and environmental review and permit documents for the relocation of public sewer infrastructure away from an eroding coastal bluff in San Mateo County.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
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2. Names and qualifications of any contractors to be retained in carrying out the project.

Findings:

Based on the accompanying staff recommendation and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Section 31113 of Division 21 of the Public Resources Code, regarding the Climate Ready Program.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a \$813,500 grant to the San Mateo Resource Conservation District (San Mateo RCD) to conduct community outreach and prepare technical studies, preliminary design plans, and environmental review and permit documents for the relocation of public sewer infrastructure away from an eroding coastal bluff in the Montara community of coastal San Mateo County (Exhibit 1).

A public sewer main serving approximately 2,200 Montara Water and Sanitary District (MWSD) customers is at risk of falling into the ocean due to historical and accelerating coastal erosion. Since the sewer main was installed 65 years ago, erosion has exposed and damaged the pipe and it is now at risk of imminent failure. Currently, the at-risk pipe is only a few feet from the eroding cliff face, indicating that the pipe may be completely exposed in under a decade (Exhibit 2). Failure of this sewer main could further accelerate bluff erosion along 3,000 feet of coastline and would release raw sewage to the Fitzgerald Marine Reserve, a Marine Protected Area and Critical Coastal Area, and the Monterey Bay National Marine Sanctuary. Failure of this sewer main would also result in catastrophic loss of service to at least 2,200 MWSD customers, and the compounding effects of failure during an extreme rain event would also affect customers served by integrated infrastructure managed by Granada Sanitary District and Sewer Authority Mid-Coastside, an estimated 24,568 people. There is no redundancy in this portion of the system, meaning there is no other existing route for the sewage if the infrastructure fails. Urgent action is needed to move this infrastructure to avoid releasing raw sewage into adjacent ocean ecosystems and enhance the resilience of this coastline to sea-level rise and storm surge. MWSD does not have sufficient funds to plan, design, permit, and move the sewer main and is partnering with San Mateo RCD and others to develop a multi-benefit project to adapt to sea level rise.

The proposed project will design and prepare permit application and environmental review materials for new sewer infrastructure that will be located inland away from exposed coastal areas and that will provide emergency sewage storage to improve system redundancy. To ensure the new infrastructure is far enough away from eroding bluffs while still proximate to the houses it serves and within existing easements, the most likely solution will involve a two-way gravity and pressure sewer pipe to be installed under Vallemar Street, immediately east of the houses and west of Highway 1 (Exhibit 2). This new alignment above the grade of the

homes would require changing to a pumped system, rather than the current gravity-based system, and may require shifting the placement of an existing water main to make space for the new infrastructure. A key consideration in planning and design will be the anticipated longevity of any proposed solution. The planning scope includes updating projected rates of erosion. A 2001 study estimated an average erosion rate of half a foot per year. Even if the actual rate has accelerated, the likely alignment of a new pipe set back 100 feet from the bluff will likely be sufficient for many decades to come.

This project evolved from conversations in Coastside One Water, a collaboration of agencies and organizations convened by the San Mateo RCD to facilitate an integrative, collaborative approach to water, wastewater, and stormwater in San Mateo County's Mid-Coast. The Coastside One Water partnership is composed of local agencies, nonprofit organizations, and technical consultants. Key participants include Coastside County Water District, San Mateo County Harbor District, Sewer Authority Mid-Coastside, City of Half Moon Bay, Montara Water and Sanitary District, San Mateo County, Granada Community Services District, Surfrider Foundation, a nonprofit organization that is led by a California Native American tribe, and the San Mateo RCD. The relocation of the sewer infrastructure that this project will facilitate will directly benefit Pillar Ridge, a 227-unit manufactured home community. This community includes many farm laborers and other disadvantaged groups. San Mateo RCD will inform and engage with this community as part of this project, as well as the broader Coastside One Water partnership and other stakeholders to ensure broad community support.

The proposed project will complete the community outreach, technical analyses, designs, environmental review, and permit applications necessary to relocate sewer infrastructure inland away from the eroding coastline. Community outreach will involve in person and virtual outreach to MWSD customers in the 25 homes directly served by the sewer main and community stakeholders, including participating organizations of Coastside One Water. The project will complete technical analyses to inform siting of and engineering designs for the new infrastructure, including a topographic analysis, geotechnical investigations to analyze the rate of bluff erosion, and an assessment of the long-term stability of proposed improvements. The project will also review rights-of-way and land ownership and secure necessary agreements with MWSD and landowners, as discussed below. The project will also perform environmental, cultural, and historical resource assessments. Using the results of these technical analyses and resource studies, the project will develop 30% and 60% engineering design plans and a basis of design report. Key elements to be considered in the engineering designs include relocating the sewer main, laterals, and pumps, relocating and upgrading the pump station, building sewer storage and redundancy, and connecting system elements. Finally, the project will complete California Environmental Quality Act documentation and permit applications for implementation of the designs to ensure regulatory compliance.

Site Description: The project site includes a 12" sewer main that runs parallel to Highway 1 along an eroding coastal bluff in Montara in unincorporated San Mateo County. It lies immediately west of 25 homes, ranging from 9 to 35 feet away from the homes, and its distance from the cliff ranges from approximately 3 to 70 feet. The pipe was installed along the alignment of a "paper street" for a formerly planned development that was abandoned due to bluff erosion. A 2001 technical study estimated the average rate of erosion at a half foot per

year and concluded that the pipe would not last to 2050. This estimated average rate of erosion does not imply a predictable or steady rate of erosion, as more significant loss of the bluff can occur in any given year. Information does not exist about potential variation in rates of erosion at the site over time, but a review of maps shows that 75% of the bluff that existed west of the Niagara Pump Station in 1965 has eroded. The geotechnical analysis that is proposed as part of this project will help update predicted rates of bluff erosion. The habitat in the area is characterized by coastal bluff vegetation and garden landscaping in the yards of the developed neighborhood.

The sewer and water infrastructure to be relocated are owned and operated by MWSD, which will be working closely with San Mateo RCD throughout this project. San Mateo RCD and MWSD do not yet have agreements in place for the relocation of the sewer main to Vallemar Street. The proposed project will develop agreements with the landowners of the 25 houses that directly connect to the at-risk pipe. Siting of new infrastructure will be determined as part of this project and will likely fall within Caltrans right-of-way. The San Mateo RCD will consult and cooperate with Caltrans as part of the design process. MWSD will be responsible for long-term management and maintenance of the new sewer infrastructure once installed, except for the private pump-laterals, which will be the responsibility of private homeowners. MWSD will maintain equipment throughout the design life of all MWSD infrastructure.

Grant Applicant Qualifications: San Mateo RCD has decades of experience managing large grants, including from the state and federal government, for similar planning and design projects and projects that span multiple public and private properties. This includes successfully managing several grants from the Coastal Conservancy. San Mateo RCD often partners with other governmental entities such as MWSD to make conservation improvements to their properties, help them comply with regulatory requirements, and build climate resilience in the region. For example, San Mateo RCD recently replaced and upgraded domestic water systems at state and county parks and cleaned sewer and stormwater lines for the harbor district. This project will leverage San Mateo RCD's experience managing grant-funded planning projects and MWSD's knowledge of local infrastructure, needs, and sewer management.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA:

The proposed project is consistent with the Conservancy's Project Selection Criteria, last updated on September 23, 2021, in the following respects:

Selection Criteria

1. Extent to which the project helps the Conservancy accomplish the objectives in the Strategic Plan.

See the "Consistency with Conservancy's Strategic Plan" section below.

2. Project is a good investment of state resources.

The proposed project will facilitate the relocation of critical infrastructure away from an eroding coastal bluff and provide important benefits to Californians as well as the resources of California. Avoiding sewer failure by relocating this infrastructure further inland will protect

water quality, benefiting public health, recreational access to this coastal area, and marine life in Fitzgerald Marine Reserve and the Monterey Bay National Marine Sanctuary. This project will also safeguard a critical public utility for residents of Montara.

This project aligns with the California Climate Adaptation Strategy's priority to "accelerate nature-based climate solutions and strengthen climate resilience of natural systems." More specifically, it supports Goal C to integrate nature-based climate solutions into relevant infrastructure and investments.

The project also aligns with Principle 4 ("Support Local Leadership and Address Local Conditions") of the State Agency Sea-Level Rise Action Plan for California and specifically, Key Action 4.7 to "Partner with tribal and local jurisdictions to prioritize adaptation actions, emphasizing a preference for those that protect and increase the resiliency of public assets, infrastructure, and larger projects with multi-benefits."

The proposed project advances infrastructure relocation as an adaptation to sea level rise and could serve as a model to inform other coastal utility districts and coastal resilience planning efforts in San Mateo County and other parts of the state faced with coastal bluff erosion, water quality, and infrastructure concerns.

3. Project includes a serious effort to engage tribes. Examples of tribal engagement include good faith, documented efforts to work with tribes traditionally and culturally affiliated to the project area.

The proposed project concept arose from discussions within the Coastside One Water partnership, which includes representatives from a nonprofit organization that is led by a California Native American tribe. The project is in an area that this organization considers to be their territory. Representatives from this nonprofit organization have communicated to San Mateo RCD that water quality is a priority, motivating the proposed project to move forward. For this project, San Mateo RCD will engage with local tribes regarding the project and will incorporate tribal interests and concerns into site assessment and project design wherever feasible.

4. Project benefits will be sustainable or resilient over the project lifespan.

The project will facilitate the relocation of the sewer infrastructure at least 100 feet from the bluff ensuring that the project benefits will last for several decades. Relocation of the sewer infrastructure will also allow this coastline to better adapt to expected climate change impacts including rising sea-level and intensifying storms and rainfall events. San Mateo RCD is committed to seeing this project through and anticipates the future implementation phase to be funded by several sources, including in-house funding from MWSD, public grants, and potentially the County of San Mateo.

5. Project delivers multiple benefits and significant positive impact.

The project will advance planning and adaptation efforts that will protect coastal habitats, water quality and recreational amenities. It will also increase community resilience to future climate change impacts such as sea-level rise and storm surge high tide events. This includes increasing resiliency for a mobile home park housing many low-income residents. In addition,

the project will add to the body of knowledge regarding best practices for managed retreat of public utility infrastructure in coastal geographies and deepen understanding of project-specific coastal resilience planning in San Mateo County by sharing lessons learned with partners, including Coastside One Water, coastal utility districts, and County staff.

6. Project planned with meaningful community engagement and broad community support.

This project concept emerged from the community during discussions among Coastside One Water participating organizations and stakeholders, making this project rooted in community needs and desires. The partnership between San Mateo RCD and MWSD will facilitate meaningful community engagement that will be incorporated into the site assessment and the design process. Various methods of virtual and in person outreach will be used to ensure the engagement process is diverse and inclusive of the community members.

PROJECT FINANCING

Coastal Conservancy	\$813,500
Montara Water and Sewer District	\$272,000
Project Total	\$1,085,500

Conservancy funding for the project is anticipated to come from a Fiscal Year 2022/23 appropriation from the Greenhouse Gas Reduction Fund (GGRF) to the Conservancy for “urgent sea-level rise adaptation and coastal resilience needs” (Budget Act of 2022, SB 154 as amended by AB 178, Chapter 45 and AB 179, Chapter 249, Statutes of 2022, and by the Budget Act of 2023, SB 101). The Greenhouse Gas Reduction Fund Investment Plan and Communities Revitalization Act (Health and Safety Code (HSC) Sections 39710 – 39723) requires that GGRF funds be used to (1) facilitate the achievement of reductions of GHG emissions consistent with the Global Warming Solutions Act of 2006 (HSC Sections 38500 *et seq*), and (2) to the extent feasible, achieve other co-benefits, such as maximizing economic, environmental and public health benefits and directing investment to disadvantaged communities (HSC Section 39712(b)). The Global Warming Solutions Act of 2006 sets forth certain GGRF funding priorities (HSC Section 38590.1).

The California Air Resources Board (“CARB”) has adopted guidelines that establish program goals that agencies must achieve with their GGRF funds. Consistent with the CARB 2018 Funding Guidelines, the proposed project will help the Conservancy meet its GGRF program goals because the project will:

- Facilitate GHG emission reductions (which includes carbon sequestration) and further the purposes of AB 32 and related statutes.
- Benefit Priority Populations (disadvantaged communities, low-income communities, or low-income households).
- Maximize economic, environmental, and public health co-benefits to the State.
- Avoid substantial burdens to disadvantaged communities and low-income communities.

The proposed project will meet these objectives by preparing technical studies, preliminary design plans, and environmental review and permit documents to allow for the relocation of threatened sewer infrastructure inland away from an eroding cliffside, thereby increasing carbon sequestration by avoiding infrastructure damage that would result in increased GHG emissions from remediation and rebuilding. The project will also enhance the resilience of sewer infrastructure that serves priority populations. The project will provide economic benefits to the State by facilitating the resilience of critical coastal infrastructure and maximize environmental and public health co-benefits by proactively avoiding significant pollution from sewage failure. The relocation of the sewer infrastructure will reduce the impacts of sea level rise on communities and natural resources, benefitting priority populations and avoiding burdens to disadvantaged communities in the project area. Lastly, the proposed project is also consistent with this funding source because the relocation of the sewer infrastructure that will be facilitated by the project addresses urgent sea level rise adaptation needs to protect communities and natural resources from sea level rise. As discussed above, urgent action is needed to move this infrastructure to avoid releasing raw sewage into adjacent ocean ecosystems and enhance the resilience of this coastline to sea-level rise and storm surge. Further, as described in this staff recommendation, in selecting this project for a grant, the Conservancy has considered its Strategic Plan, the State Agency Sea Level Rise Action Plan, geographic areas of vulnerability, disadvantaged communities, and opportunities for federal financial support.

Unless specifically identified as “Required Match,” the other sources of funding and in-kind contributions described above are estimates. The Conservancy does not typically require matching funds or in-kind services, nor does it require documentation of expenditures from other funders or of in-kind services. Typical grant conditions require grantees to provide any funds needed to complete a project.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The project is consistent with Section 31113 of Chapter 3 of Division 21 of the Public Resources Code, which establishes the Climate Ready Program and authorizes the Conservancy to address the impacts and potential impacts of climate change on resources within the Conservancy’s jurisdiction.

Pursuant to Sections 31113(b) and 31113(c), the Conservancy is authorized to award grants to public agencies to undertake projects within the Conservancy’s jurisdiction, “including, but not limited to, those that reduce greenhouse gas emissions, address extreme weather events, sea level rise, storm surge, beach and bluff erosion, saltwater intrusion, flooding, and other coastal hazards that threaten coastal communities, infrastructure, and natural resources.” Pursuant to Section 31113(c), the Conservancy must, to the extent allowed, prioritize projects that maximize public benefits and accomplish certain purposes, including reducing emissions of greenhouse gases, preserving and enhancing coastal wetlands and natural lands, and providing recreational opportunities.

Section 31113(d)(1)(B) requires the Conservancy to prioritize projects that provide multiple public benefits, including, but not limited to, protection of communities, natural resources, and recreational opportunities. As discussed above, the proposed project will facilitate the use of managed retreat to create resilient infrastructure that protects sewer service to the community, benefits the ocean resources in adjacent marine reserves, and protects recreational access to the coast by avoiding potential closures associated with sewer infrastructure failure.

Consistent with these sections, the proposed project will facilitate the relocation of coastal infrastructure, which is located within the coastal zone and therefore within the Conservancy's jurisdiction, to reduce the threat of sea level rise and enhance coastal habitats, where feasible.

CONSISTENCY WITH CONSERVANCY'S [2023-2027 STRATEGIC PLAN](#):

Consistent with **Goal 4.1 Sea Level Rise Adaptation Projects**, the proposed project will complete designs for relocating public infrastructure threatened by coastal erosion to protect communities and natural resources from sea level rise.

Consistent with **Goal 4.3 Multi-Benefit Nature-Based Climate Adaptation**, the proposed project will include preparation of a design plan for the relocation of threatened coastal infrastructure, providing multiple benefits including protecting the health of adjacent ecosystems and increasing resilience of coastal habitats and communities to climate change.

CEQA COMPLIANCE:

The proposed planning project consists of preparing technical studies, preliminary design plans, and permit application and environmental review materials. Thus, the proposed project involves only data gathering, resource evaluation, planning, and feasibility analyses for possible future actions that have not yet been approved, adopted, or funded. These activities are statutorily exempt from review under CEQA pursuant to Title 14 of the California Code of Regulations Section 15262, which exempts planning and feasibility studies for possible future actions that have not yet been approved, adopted, or funded. Consistent with Section 15262, the project will consider environmental factors. The proposed project is also categorically exempt under Section 15306, which exempts data collection and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource. Consistent with Section 15306, the data collection and resource evaluation components of the project will not cause major or serious disturbance to the environment.

Upon approval of the project, Conservancy staff will file a Notice of Exemption.